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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,625	12/20/2000	Frank Bor-Her Chen	25164-67462	9358
28863 7590 09/06/2007 SHUMAKER & SIEFFERT, P. A. 1625 RADIO DRIVE SUITE 300 WOODBURY, MN 55125			EXAMINER TSOY, ELENA	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/742,625	CHEN ET AL.	
	Examiner	Art Unit	
	Elena Tsoy	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-39, 51, 52 and 67-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-39, 51, 52 and 67-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Amendment filed on July 23, 2007 has been entered. Claim 50 has been cancelled. New claim 71 has been added. Claims 37-39, 51-52, and 67-71 are pending in the application.

Claim Objections

1. Objection to claim 50 under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim has been withdrawn due to amendment.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The Examiner Note: the phrase “**formaldehyde-free**” primer coating composition was broadly interpreted by the Examiner according to conventional meaning as a primer coating composition having no unreacted formaldehyde. It is well settled that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. Claims 37-39, 51-52, and 67-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 2224732 in view of Cummings (US 3,529,993), further in view of Helmer et al (WO 9622338) for the reasons of record set forth in paragraph 8 of the Office Action mailed on 4/23/2007 because claim 71 recites limitations of claims 37 and 50.
4. Claims 38-39, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 2224732 in view of Cummings, further in view of Helmer et al, and further in view of van der Hoeven (US 4,789,604) for the reasons of record set forth in paragraph 9 of the Office Action mailed on 4/23/2007 because claim 71 recites limitations of claims 37 and 50.

Response to Arguments

5. Applicants' arguments filed July 23, 2007 have been fully considered but they are not persuasive.

(A) Applicant respectfully traverses the rejection over DE 2224732 in combination with Cummings and Helmer et al. The Helmer reference fails to teach or suggest that his formaldehyde-free, rapid crosslinking composition could be useful as a primer for cellulosic or wood composites, or would be compatible with other components used in the manufacture of such composites, such as the presently claimed topcoat composition. A ground for this rejection appears to be that this is a simple process of replacing one "amino resin" for another. However, the present claim 37 requires a very specific composition be used as the primer, and this composition is completely different from the aminoplast resin utilized in DE '732 which is made by reaction of amine with formaldehyde. In contrast, the present claim 37 requires that the primer composition be formaldehyde free, and the plain language of the claim makes clear that the primer composition is not an amino resin as such term is used in the art.

The Examiner respectfully disagrees with this argument. First of all, the aminoplast resin utilized in DE '732 is formaldehyde-free because formaldehyde is **reacted** with amine so that formaldehyde is no longer exists. Secondly, applicants attack against the Helmer reference individually is improper because one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Cummings teaches that amino resins curing fast at room temperature may be used for factory applied **wood priming** (See column 2, lines 14-20) or in **traffic** paints where virtually no waiting period is necessary for the paint to dry before traffic can pass (See column 2, lines 36) instead of heat curing or slow curing prior art compositions including **prior art wood primers** (See column 1, lines 56-66). Helmer et al teach a fast hardening aqueous (amino resin) coating composition can be utilized in applications where it is desirable to form a hard, smear-resistant, non-tracking surface very quickly after deposit of the coating under ambient conditions, *in particular*, as fast hardening aqueous traffic marking paint, which forms a hard, smear-resistant

Art Unit: 1762

surface very soon after application under ambient conditions to a surface, such as a road way, and which allows the resumption of normal traffic with minimal interruption (See column 1, lines 11-20).

Therefore, one of ordinary skill in the art would have clear incentive to replace wood primer of DE '732 with room temperature fast curing **wood**/traffic resin of Cummings to achieve the desired room temperature fast curing. Second, one of ordinary skill in the art would also have clear incentive to use Helmer **traffic** resin instead of wood/**traffic** resin of Cummings to achieve the desired hard, smear-resistant coating. Third, one of ordinary skill in the art would have reasonable expectation of compatibility of top coat layer of an aqueous amino-plastics resin and a dispersion of a self-cross-linking acrylic resin of DE '732 with an aqueous (amino resin) of Helmer. Besides, it is well known in the art that compatibility of resin generally depend on hydrophilic-hydrophobic properties: hydrophilic resins are compatible with hydrophilic resins and hydrophobic resins are compatible with hydrophobic resins.

Therefore, in contrast to Applicants argument, a prima facie case of obviousness over DE 2224732 in combination with Cummings and Helmer et al has been established by the Examiner.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1762

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.
Primary Examiner
Art Unit 1762

ELENA TSOY
PRIMARY EXAMINER
ETsoy

August 31, 2007